If you are using a printed copy of this procedure, and not the on-screen version, then you MUST make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

8.20.3 C-A Aerosol Can Handling and Recycling

Text Pages 2 through 4

Hand Processed Changes

HPC No.	Date	Page Nos.	Initials

Approved: _____***Signature on File***_____ _____
Collider-Accelerator Department Chairman Date

M. Van Essendelft

8.20.3 C-A Aerosol Can Handling and Recycling

1. Purpose

To establish a policy and requirements for handling and disposing of used aerosol cans in a manner that minimizes the risk to the user, to others, and to the environment. This procedure applies to handling and disposal of all empty or partially empty aerosol cans generated within the C-A Department and their programs.

2. Responsibilities

2.1 The Environmental Coordinator, or his designee, shall be authorized to operate the AeroVent 3 and shall ensure that the Inventory Log Sheets are filled out every time the AeroVent 3 is used.

2.2 The Environmental Coordinator, shall maintain records, inspect, and control access to the aerosol can SAA to ensure proper handling and of cans and record keeping.

3. Prerequisites

8.3 Authorized operators of the AeroVent 3 shall be trained in this procedure.

3.2 Use a drum that is free of visual damage (i.e., dents, rust, etc.) Use secondary containment that is capable of holding 100% of the largest containers volume.

3.3 Post the Satellite Accumulation Area Basic Rules Sign near container and label the container with a "Hazardous Waste Label".

4. Precautions

4.1 No radioactive materials are to be brought to the aerosol can recycling SAA.

4.2 **DO NOT** use system with a drum that is less than 20-gallon capacity.

4.3 **DO NOT** collect caustics/corrosive chemicals (i.e., sodium hydroxide and potassium hydroxide which is an ingredient in oven cleaner) in the drum with paints and solvents. Caustics can generate heat when mixed with other substances. Corrosives chemicals include strong acids, bases, and dehydrating agents. If there are ***any*** questions **STOP** and contact your Environmental compliance representative or Environmental Coordinator

4.4 **DO NOT** puncture cans containing foam insulation.

4.5 **DO NOT** puncture power sprays (i.e., deodorant) because they have the potential to create a static buildup and could self-ignite.

4.6 **DO NOT** use the aerosol can puncture system while smoking or when open flame is present.

4.7 Wear safety goggles and green vinyl or nitrile gloves (disposable) while operating system.

4.8 Have on hand rags, paper towel or rag on a roll to blot or wipe up any residual product that might drip from punctured can.

4.9 Ensure anti-static wire is properly grounded to drum.

4.10 Remove AeroVent system once the drum is 70% full (when contents reach within 10" of the top).

4.11 Replace activated carbon cartridge after every 1,200 to 1,400 cans punctured.

4.12 Check the product (aerosol can) against the Waste Description Index (Attachment C) to verify the Waste Description and Chemical Constituents are listed. If the product does not match any of the chemical constituents listed **STOP IMMEDIATELY** and contact the Environmental Coordinator or Environmental Compliance Representative for guidance.

4.13 **Note: Remove cap from aerosol can prior to insertion.**

5. Procedure

5.1 Lift the operating handle to release clamp (Figure 1, AeroVent 3 Operation Diagram), and open the AeroVent 3 lid.

> **Note:**
> Operating handle should be lubricated regularly with light oil.

5.2 Insert up to three aerosol cans, nozzle end forward, into AeroVent 3 housing sleeve.

> **Note:**
> If emptying 2 3/4" or smaller cans, insert 1, 2, or 3 aerosol cans with the spray nozzles pointing towards the clamp, and up against the forward stop(figure 2, AeroVent 3 Operation Diagram). For 3" cans, replace the 2 ½" tray with the optional 3" tray and insert a single can into the tray. Place the can against the forward stop as above.

5.3 Close the lid. Operate by pushing down on the operating handle. The clamp will engage the lid and push the lid down.

5.4 Push down until the operating clamp "locks" into place. The aerosol cans have now been punctured (figure 3, AeroVent 3 Operation Diagram).

5.5 Pull up on the operating handle until the clamp "unlocks", but is still in contact with the lid (Drain position, same as figure 2). The cans are now draining. To ensure that cans are drained wait 2 minutes before opening.

5.6 Lift the handle to the "Unload" position and open the cover to remove the cans (figure 4, AeroVent 3 Operation Diagram).

5.7 Discard aerosol can in the appropriate scrap metal container.

5.8 Record waste description and volume of waste on the Inventory Log Sheet located at the Satellite Accumulation Area container. (Reference "Waste Description Index" and "Inventory Log Sheet".)

6. Documentation

6.1 Inventory Log Sheet

7. References

7.1 SBMS Subject Area " Hazardous Waste Management".

7.2 C-A-OPM 8.20 "Procedure for Handling and Disposal of Hazardous Waste".

7.3 NEWSTRIPE, Inc. AeroVent 3 Owner's Manual

8. Attachments

8.1 AeroVent 3 Operation Diagram

8.2 Waste Description index.

8.3 Inventory Log Sheet

AERO VENT 3 OPERATION DIAGRAM

Attachment 8.1

AEROVENT-3

FIGURE 1
(OPEN, NO AEROSOL CAN)

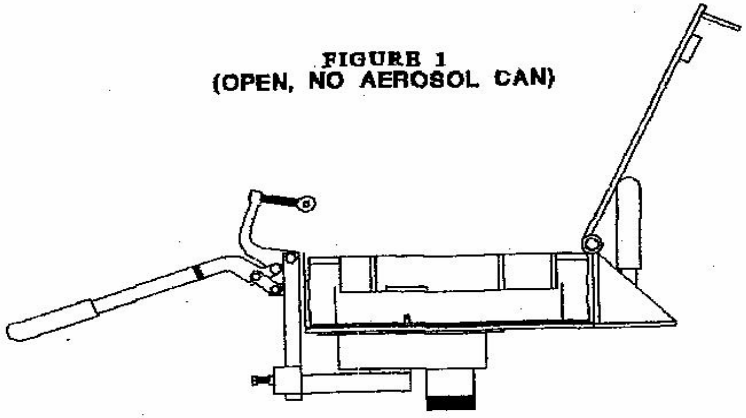


FIGURE 2
(ABROSOL CAN INSERTED, LID CLOSED)

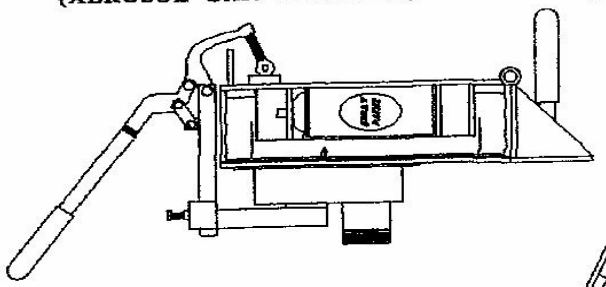


FIGURE 3
(LID PRESSURE INCREASED, CAN PUNCTURED)

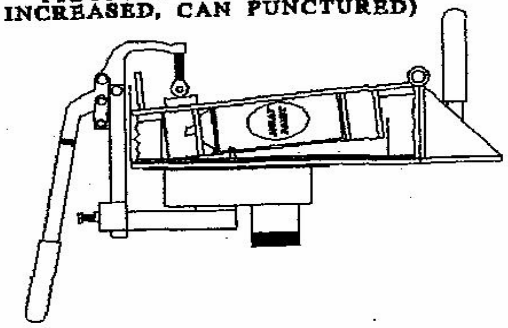
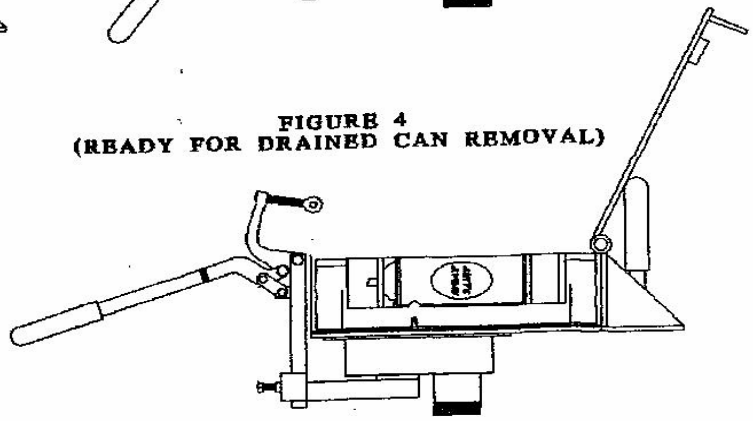


FIGURE 4
(READY FOR DRAINED CAN REMOVAL)



WASTE DESCRIPTION INDEX

Attachment 8.2

NOTE 1: DO NOT ADD CORROSIVES (I.E., SODIUM HYDROXIDE, POTASSIUM HYDROXIDE)
NOTE 2: DO NOT PUNCTURE CANS CONTAINING FOAM INSULATION
NOTE 3: CONTACT YOUR SUPERVISOR FOR GUIDANCE IF PRODUCT BEING DISPOSED OF IS NOT LISTED

ITEM	WASTE DESCRIPTION	CHEMICAL CONSTITUENTS
1	BRAKE CLEANER	TOLUENE, METHANOL AND PETROLEUM DISTILLATES
2	CHOKE CLEANER	ACETONE, METHYL ETHYL KETONE AND ISOPROPANOL
3	DEICER	ETHYLENE AND PROPYLENE GLYCOL
4	OIL	PETROLEUM DISTILLATES
5	PAINT	TOLUENE, ETHYLBENZENE, XYLENE, METHANOL, BUTANOL, ACETONE, MEK. METHYL ISOBUTYL KETONE, CADMIUM SULFIDE, CADMIUM SELENIDE, BARIUM SULFATE, PETROLEUM DISTILLATES
6	WINDOW CLEANER	ISOPROPYL ALCOHOL, ACETONE
7	3HREE CHEWING GUM & WAX REMOVER	PROPANE, BUTANE
8	INSTANT COLD GALVANIZE	1,1,1 TRICHLOROETHANE, ACETONE, TOLUENE, PROPANE, XYLENE
9	LPS 3 HEAVY DUTY RUST INHIBITOR	DIPROPYLENE GLYCOL METHYL ETHER, PETROLEUM OIL
10	ZEP IRONCLAD	NAPHTHA, N-BUTANE, PROPANE, ISOBUTANE
11	LYSOL DISINFECTANT SPRAY	ETHANOL
12	NAPA POWER LUBE	PETROLEUM DISTILLATES
13	SLIPIT LUBRI-CAN	ISOBUTANE, PROPANE
14	ZEP 30	ETHYLENE GLYCOL MONOBUTYL ETHER
15	ENGINE STARTER FLUID	DIETHYL ETHER, N-HEPTANE, ISOHEXANE
16	WD-40	PETROLEUM DISTILLATES
17	WASP FREEZE	PYRETHRINS, PIPERONYL BUTOXIDE, CABARYL, 1,1,1, TRICHLOROETHANE, ODORLESS MINERAL SPIRITS, N-METHYL PYRROLIDONE, CARBON DIOXIDE
18	LIQUID WRENCH PENETRANT	KEROSENE, PETROLEUM DISTILLATES

INVENTORY LOG SHEET

Attachment 8.3

	Date (Mo/Day/Yr)	Operator (Last Name)	Number of Cans	Waste Description (Refer to List)	Volume of Waste (i.e. 2 oz.)	Comments
1						
2						
3						
4						
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